

# Miniautre Glass Passivated Single-Phase Surface Mount Bridge Rectifier Reverse Voltage 600 Volts Forward Current 0.5 Ampere

## **Features**

Plastic package has Underwriters Laboratory Flammability

Classification 94V-0

Glass passivated chip junctions

High surge overload rating:30A peak

Saves space on printed circuit boards

High temperature soldering guaranteed:260 /10 seconds

#### **Mechanical Data**

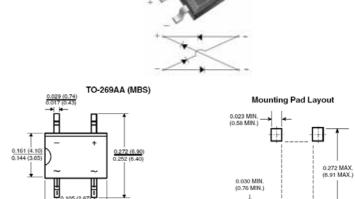
Case: Molded plastic body over passivated junctions

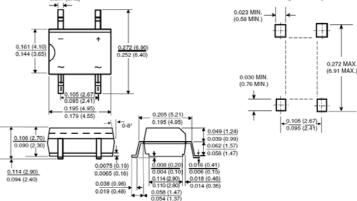
Terminals: plated leads solderable per MIL-STD-750,

Method 2026

Mounting Position:Any

Weight: 0.078 oz., 0.22g





## **Maximum Ratings & Electrical Characteristics**

(T<sub>A</sub>=25 unless otherwise noted)

Parameter	Symbol	MB6SA	Unit
Maximum repetitive peak reverse voltage	$V_{RRM}$	600	V
Maximum RMS voltage	$V_{RMS}$	420	V
Maximum DC blocking voltage	$V_{DC}$	600	٧
Maximum Average forward output current (see Fig.1) on glass-epoxy P.C.B on aluminum substrate	I <sub>F(AV)</sub>	0.5 <sup>(1)</sup> 0.8 <sup>(2)</sup>	А
Peak forward surge current 8.3 MS single HALF sine-wasuperimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	30	А
Rating for fusig (t<8.3ms)	l <sup>2</sup> t	5	A <sup>2</sup> sec
Maximum instantaneous forward voltage drop per leg at 0.4A	VF	1.00	V
Maximum DC reverse current at TA=25 rated DC blocking voltage per leg TA=125	IR	5 100	μΑ
Typical thermal resistance per leg	R <sub>eJA</sub> R <sub>eJA</sub> R <sub>eJL</sub>	85 <sup>(1)</sup> 70 <sup>(2)</sup> 20 <sup>(1)</sup>	/W
Typical junction capacitance per at 4.0V,1.0MHz	Cj	13	pF
Operating junction and storage temperature range	TJ,T <sub>STG</sub>	-55 to +150	

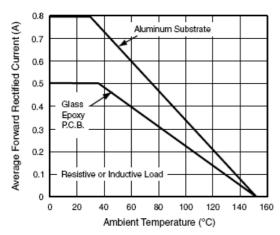
Notes: 1. On glass epoxy P.C.B. mounted on 0.05×0.05"(1.3×1.3mm) pads

2. On aluminum substrate P.C.B.whth an area of 0.8×0.8" ( 20×20mm ) mounted on 0.05×0.05"(1.3×1.3mm) solder pad



### **Ratings and Characteristics Curves**

(TA = 25 unless otherwise noted)



**Figure 1.Derating Curve for Output Rectified Current** 

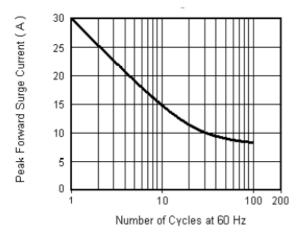


Figure 2.Maximum Non-Repetitive Peak Forward Surge Current Per Leg

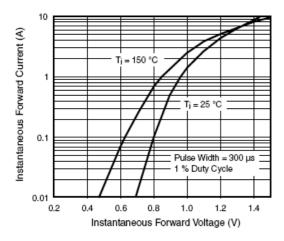


Figure 3.Typical Forward Voltage Characteristics Per Leg

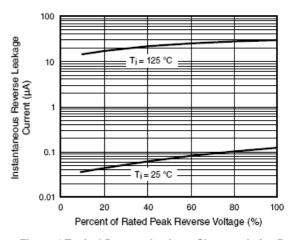


Figure 4. Typical Reverse Leakage Characteristics Per Leg

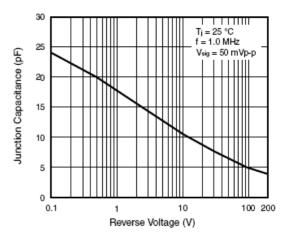


Figure 5. Typical Junction Capacitance Per Leg

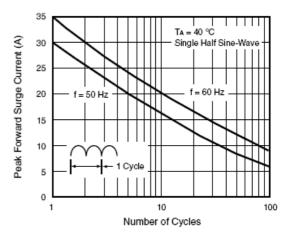


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Diode